

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-22 (Canceled).

Claim 23. (Currently amended) A field effect transistor comprising:

a substrate having a first conductivity type;

a drain area in the substrate having a second conductivity type opposite to the first conductivity type;

a source area in the substrate laterally spaced from the drain area and having a doping of the second conductivity type;

a channel area in the substrate disposed between the source area and the drain area;

and

a plurality of regions of the second conductivity type, each of the plurality of regions having a first end and a second end, the first end being electrically connected to the drain area, and the second end being open and extending into a portion of the substrate having the first conductivity type, such that alternating regions having the first conductivity type and having the second conductivity type are formed below the drain area.

Claim 24. (Cancelled)

Claim 25. (Previously presented) The field effect transistor of claim 23, wherein the plurality

of regions comprise a plurality of parallel columns.

Claim 26. (Previously presented) The field effect transistor of claim 23, wherein the plurality of regions has a comb-shaped cross section.

Claim 27. (Previously presented) The field effect transistor of claim 23, wherein the substrate comprises a surface at which the source area, the channel area, and the drain area are arranged, and wherein the plurality of regions extend in a parallel manner generally away from the surface of the substrate.

Claim 28. (Previously presented) The field effect transistor of claim 23, wherein:

the substrate comprises a base substrate having a surface and an epitaxial layer epitaxially grown on the surface of the base substrate;

the source area, the drain area, and the channel area are disposed in the epitaxial layer; and

the plurality of regions extend from the drain area towards the surface of the base substrate.

Claim 29. (Previously presented) The field effect transistor of claim 23, wherein the drain area includes a low-doped drain sub-area having a plurality of drain portions in which a doping concentration in a direction toward the channel area decreases.

Claim 30. (Previously presented) The field effect transistor of claim 29, wherein a lateral dimension of at least one of the plurality of regions is at least as great as a lateral dimension of a most highly doped portion of the plurality of drain portions.

Claim 31. (Previously presented) The field effect transistor of claim 29, wherein the low-doped drain sub-area includes three laterally adjacent drain portions.

Claim 32. (Currently amended) A field effect transistor comprising:

a substrate having a first conductivity type;

a drain area in the substrate having a second conductivity type opposite to the first conductivity type;

a source area in the substrate laterally spaced from the drain area and having a doping of the second conductivity type;

a channel area in the substrate disposed between the source area and the drain area;

and

a plurality of regions of the second conductivity type ~~extending from the drain area into a portion of the substrate having the first conductivity type~~, each of the plurality of regions having a first end and a second end, the first end being electrically connected to the drain area, and the second end being open and extending into a portion of the substrate having the first conductivity type, such that alternating regions having the first conductivity type and having the second conductivity type are formed below the drain area;

wherein the substrate comprises a surface at which the source area, the channel area, and the drain area are arranged, and wherein the plurality of regions extend in a parallel

manner generally away from the surface of the substrate.

Claim 33. (Previously presented) The field effect transistor of claim 32, wherein the plurality of regions comprise a plurality of parallel columns.

Claim 34. (Previously presented) The field effect transistor of claim 32, wherein the plurality of regions has a comb-shaped cross section.

Claim 35. (Previously presented) The field effect transistor of claim 23, wherein the substrate comprises a surface at which the source area, the channel area, and the drain area are arranged, and wherein the plurality of regions extend in a parallel manner generally parallel to the surface of the substrate.

Claim 36. (New) A field effect transistor comprising:

- a substrate having a first conductivity type;

- a drain area in the substrate having a second conductivity type opposite to the first conductivity type;

- a source area in the substrate having a doping of the second conductivity type;

- a channel area in the substrate disposed between the source area and the drain area;

and

- a plurality of regions of the second conductivity type, each of the plurality of regions having a first end and a second end, the first end being electrically connected to the drain area, and the second end in contact with a portion of the substrate having the first

conductivity type, wherein that the plurality of regions of the second conductivity type are not connected at their second ends by material of the second conductivity type and alternating regions having the first conductivity type and having the second conductivity type are formed below the drain area.

Claim 37. (New) The field effect transistor of claim 36, wherein the plurality of regions comprise a plurality of parallel columns.

Claim 38. (New) The field effect transistor of claim 36, wherein the plurality of regions has a comb-shaped cross section.

Claim 39. (New) The field effect transistor of claim 36, wherein the substrate comprises a surface at which the source area, the channel area, and the drain area are arranged, and wherein the plurality of regions extend in a parallel manner generally away from the surface of the substrate.

Claim 40. (New) The field effect transistor of claim 39, wherein:

the substrate comprises a base substrate having a surface and an epitaxial layer epitaxially grown on the surface of the base substrate;

the source area, the drain area, and the channel area are disposed in the epitaxial layer;
and

the plurality of regions extend from the drain area towards the surface of the base substrate.

Claim 41. (New) The field effect transistor of claim 36, wherein the drain area includes a low-doped drain sub-area having a plurality of drain portions in which a doping concentration in a direction toward the channel area decreases.

Claim 42. (New) The field effect transistor of claim 41, wherein a lateral dimension of at least one of the plurality of regions is at least as great as a lateral dimension of a most highly doped portion of the plurality of drain portions.

Claim 43. (New) The field effect transistor of claim 41, wherein the low-doped drain sub-area includes three laterally adjacent drain portions.